

TROPICAL STORM WAYNE

Tropical Storm Wayne was first detected as a mid-level circulation on satellite imagery in early November. Figure 3-25-1 shows the broad cloud structure associated with the system. Aircraft reconnaissance around this period showed that the disturbance was most developed at mid-levels. Wayne moved northward initially and began developing a more definitive surface circulation which became evident in synoptic data on 7 November. Wayne lasted only a relatively short time, but he still proved to be one of the more difficult storms to forecast for 1979.

JTWC's first forecasts called for recurvature. They were based on the 080000Z November 500 mb synoptic situation which showed a weakness in the subtropical ridge with westerlies extending south to 23°N latitude. Steering flow at all levels, however, was not consistent and strong low-level easterlies prevented Wayne from recurving toward the east. On 9 November, an extratropical system with accompanying surface frontogenesis developed north of Wayne. This caused a break in the otherwise persistent easterly flow and Wayne began to track northward. JTWC forecasts again reflected recurvature and called for early dissipation due to the strong shear from low-level easterlies and upper-level westerlies. The extratropical system moved rapidly eastward bypassing Wayne. By 11 November, strong northeasterlies had once again been established, and Wayne turned back to the west, ultimately, tracking west-southwest toward the central

Philippines. At the same time, strong shear did weaken Wayne as it tracked toward the Philippines (Figure 3-25-2) and dissipation occurred as he made landfall over Luzon.

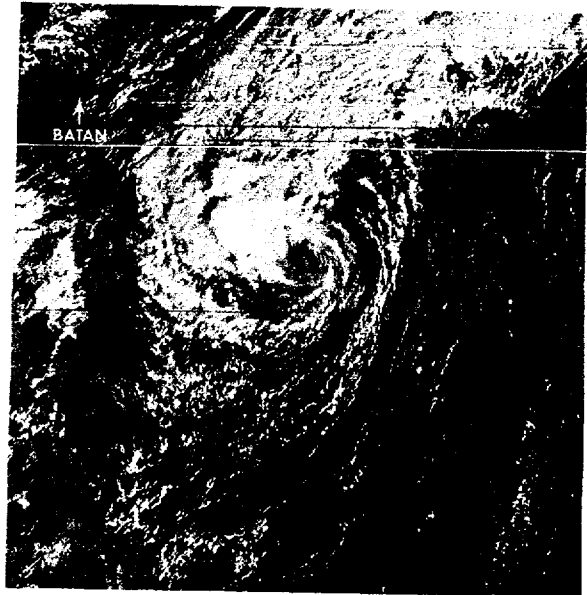


FIGURE 3-25-2. Tropical Storm Wayne weakening due to strong shear as it approached the Philippines, 12 November 1979, 0100Z. (DMSP imagery)

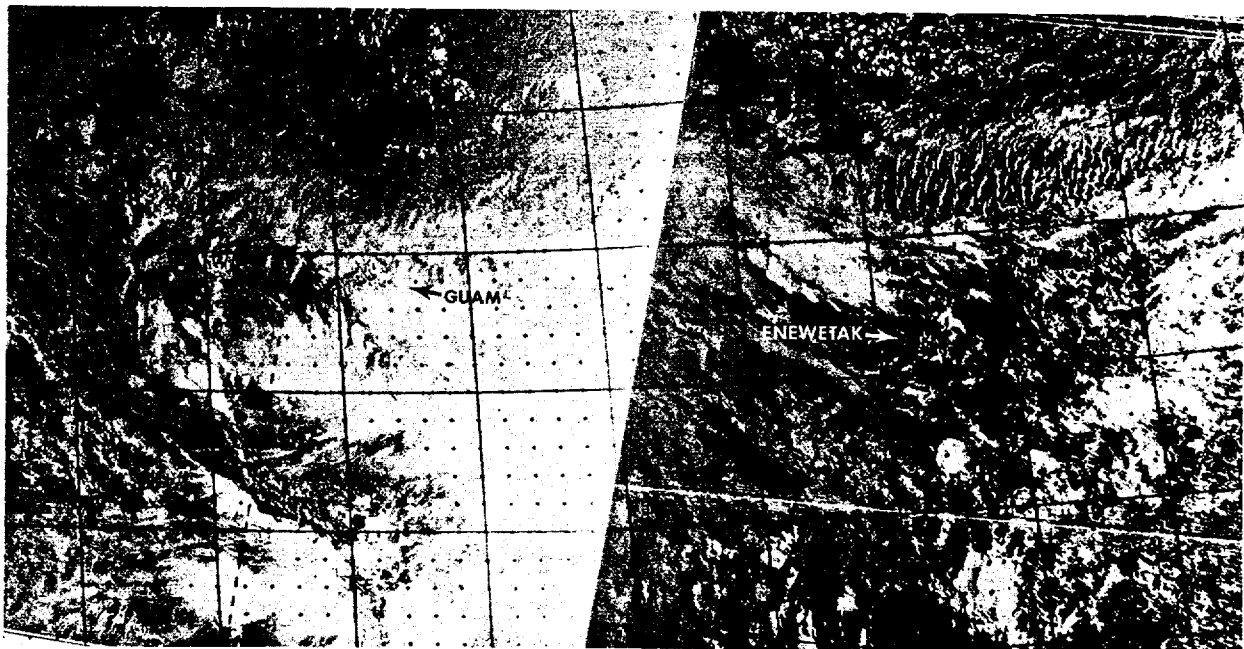


FIGURE 3-25-1. Disturbance stage of Tropical Storm Wayne when the system was mainly a mid-level circulation, 6 November 1979, 1208Z. (DMSP imagery)